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Patel et al.

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[54] **PRODUCT DISPENSER AND HOLDER**

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[21] Appl. No.: **09/118,358**

[22] Filed: **Jul. 17, 1998**

[51] **Int. Cl.**[7] **A45D 40/06**

[52] **U.S. Cl.** **401/78**; 401/87

[58] **Field of Search** 401/78, 87, 86, 401/88, 68, 75

[56] **References Cited**

U.S. PATENT DOCUMENTS

1,835,580	12/1931	Wild .	
2,302,473	11/1942	Reichenbach .	
2,318,152	5/1943	Gelardin .	
2,469,631	5/1949	Broder .	
2,797,803	7/1957	Hopgood .	
2,798,599	7/1957	Croce .	
2,815,123	12/1957	Safianoff .	
2,838,169	6/1958	Grau .	
3,083,822	4/1963	Clark .	
3,298,509	1/1967	Hultgren .	
4,820,070	4/1989	Spatz .	
5,197,814	3/1993	Lombardi et al. .	
5,560,727	10/1996	Vaupel .	
5,599,124	2/1997	Ackermann et al. .	
5,609,430	3/1997	Mazzola et al. .	
5,865,550	2/1999	Bouix	401/78

FOREIGN PATENT DOCUMENTS

599960	6/1960	Canada .
0182655 A2	5/1986	European Pat. Off. .
0 568 555 B1	11/1993	European Pat. Off. .
2698528	6/1994	France .
3442094A	5/1986	Germany .
406090819	4/1994	Japan .
WO 96/32031	10/1996	WIPO .
WO 97/09903	3/1997	WIPO .

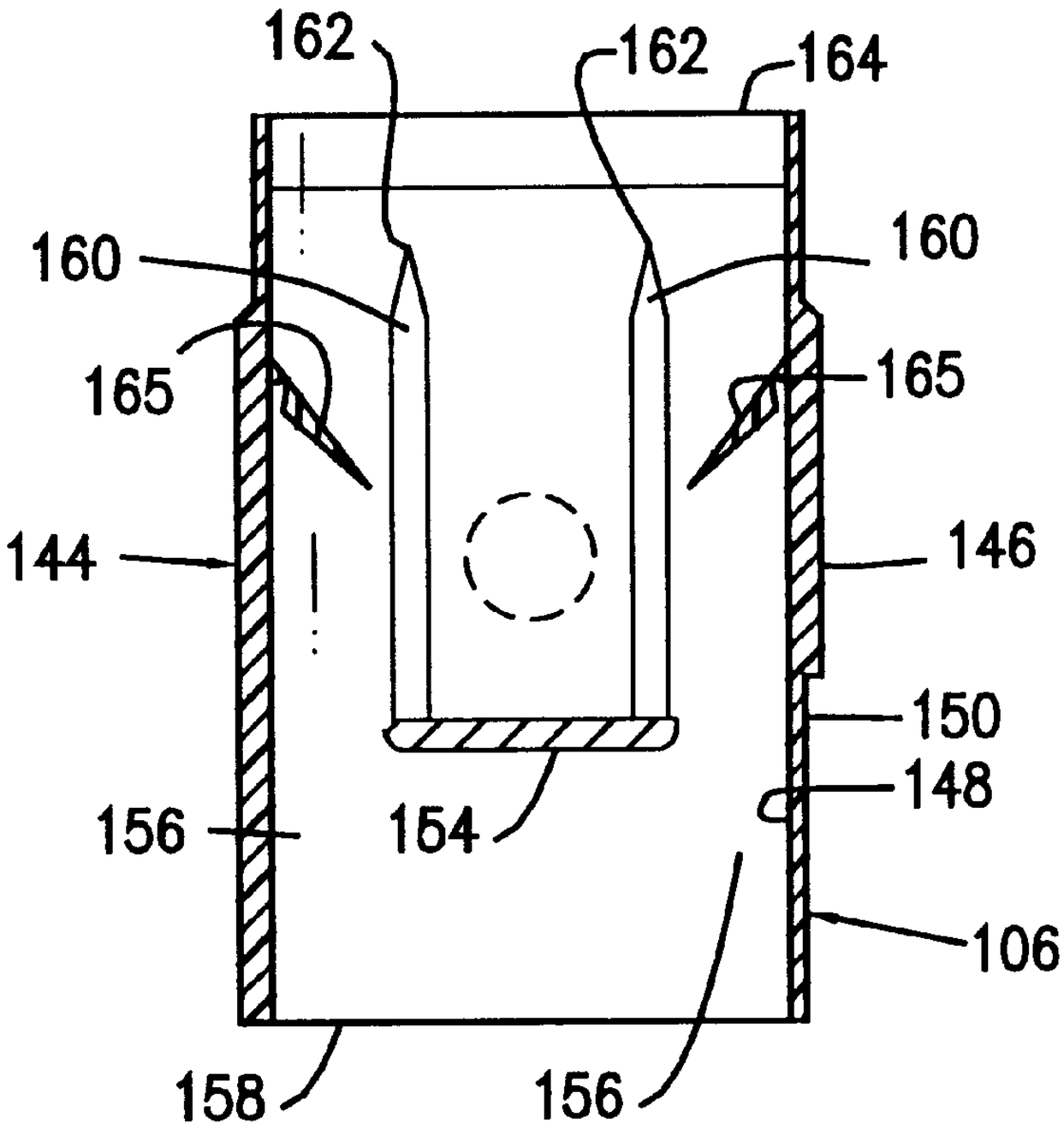
Primary Examiner—Charles R. Eloshway

Attorney, Agent, or Firm—Lerner, David, Littenberg, Krumholtz & Mentlik, LLP

[57] **ABSTRACT**

A dispenser includes a holder/carrier for products of stick-like form to enable application of a wide variety of materials. A plurality of resilient/flexible barbs having spring-like properties extend into the holder/carrier for embedding into the received material. The barbs preclude dislodgment of the stick-like product which may occur due to vibration caused during shipment or subsequent use of the dispenser.

59 Claims, 5 Drawing Sheets



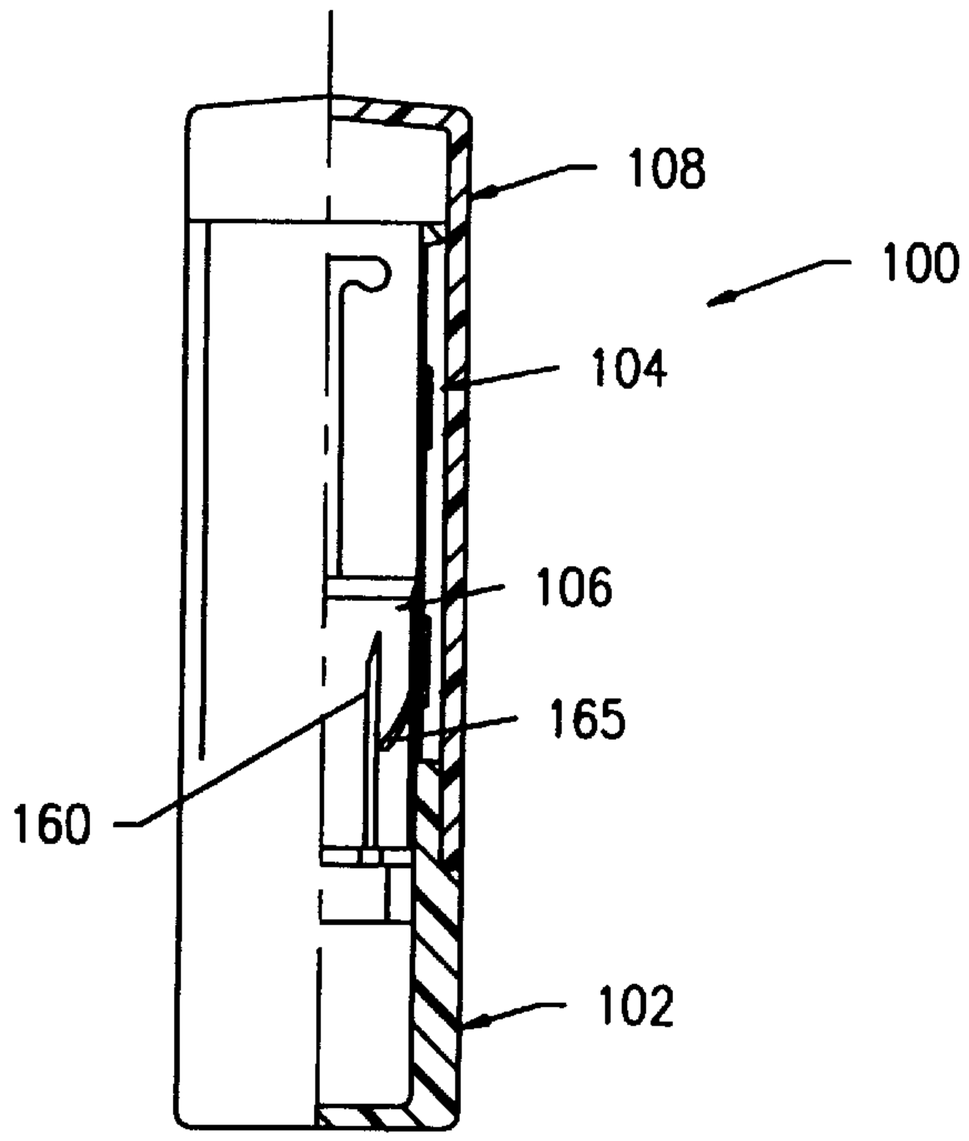


FIG. 1

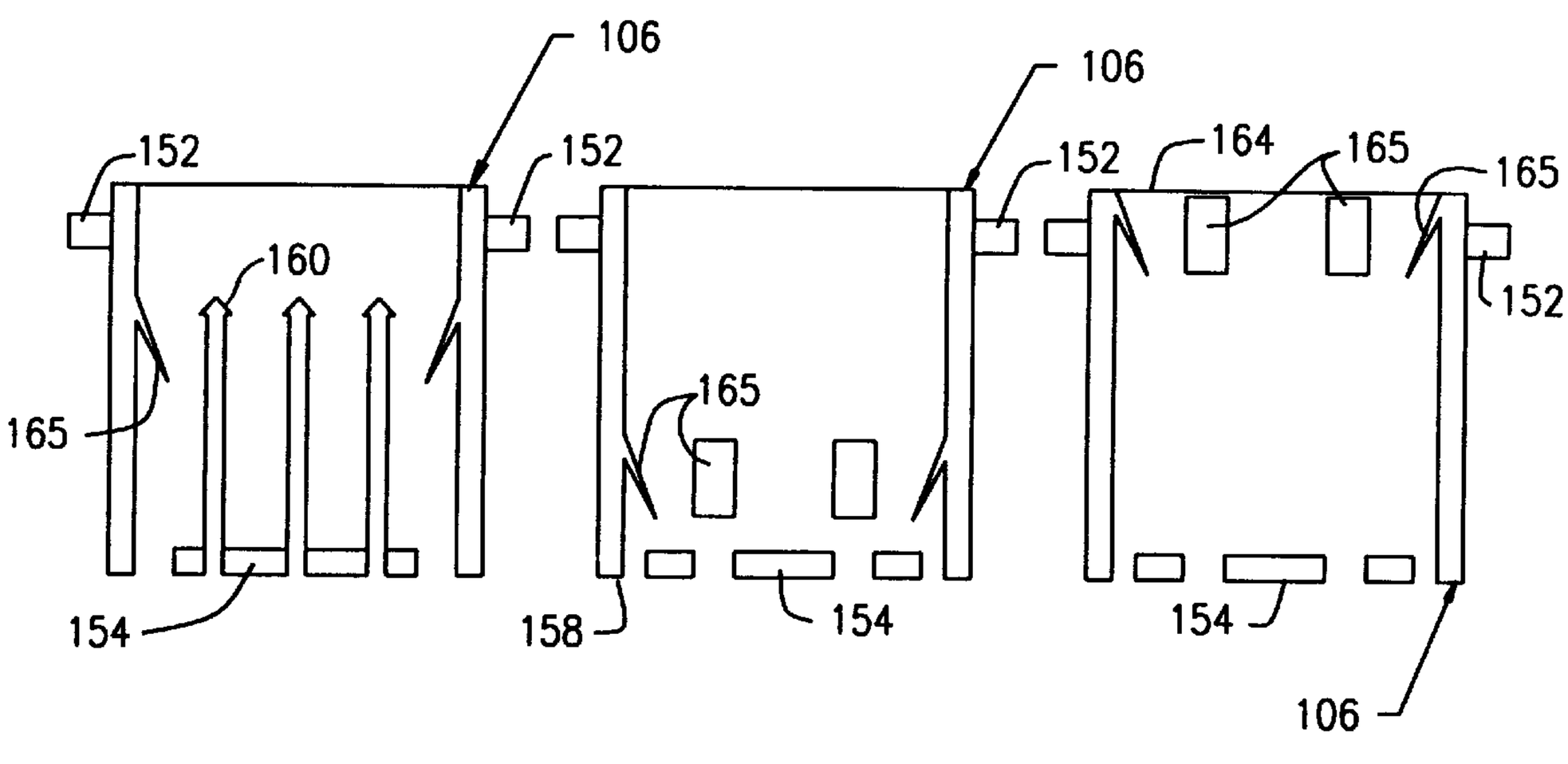


FIG. 9 FIG. 10 FIG. 11

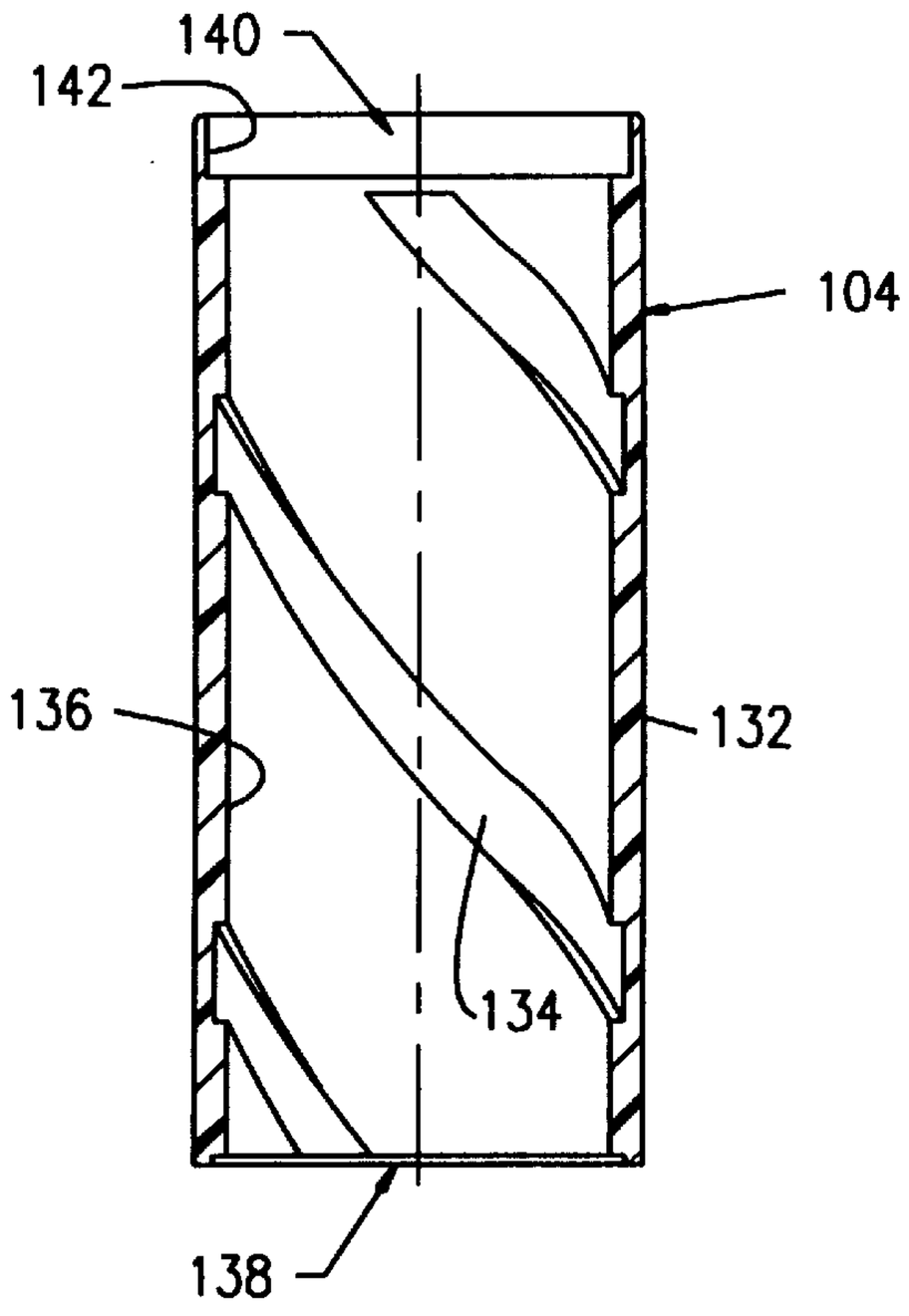

140
142
104
136
132
134
138

FIG. 3

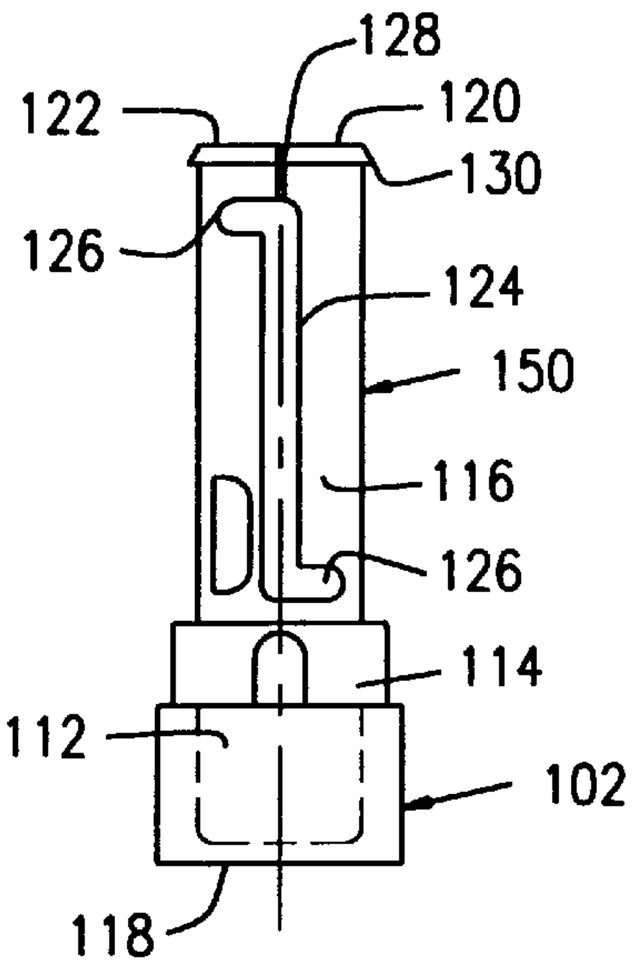

128
122
120
130
126
124
150
116
126
114
112
102
118

FIG. 2

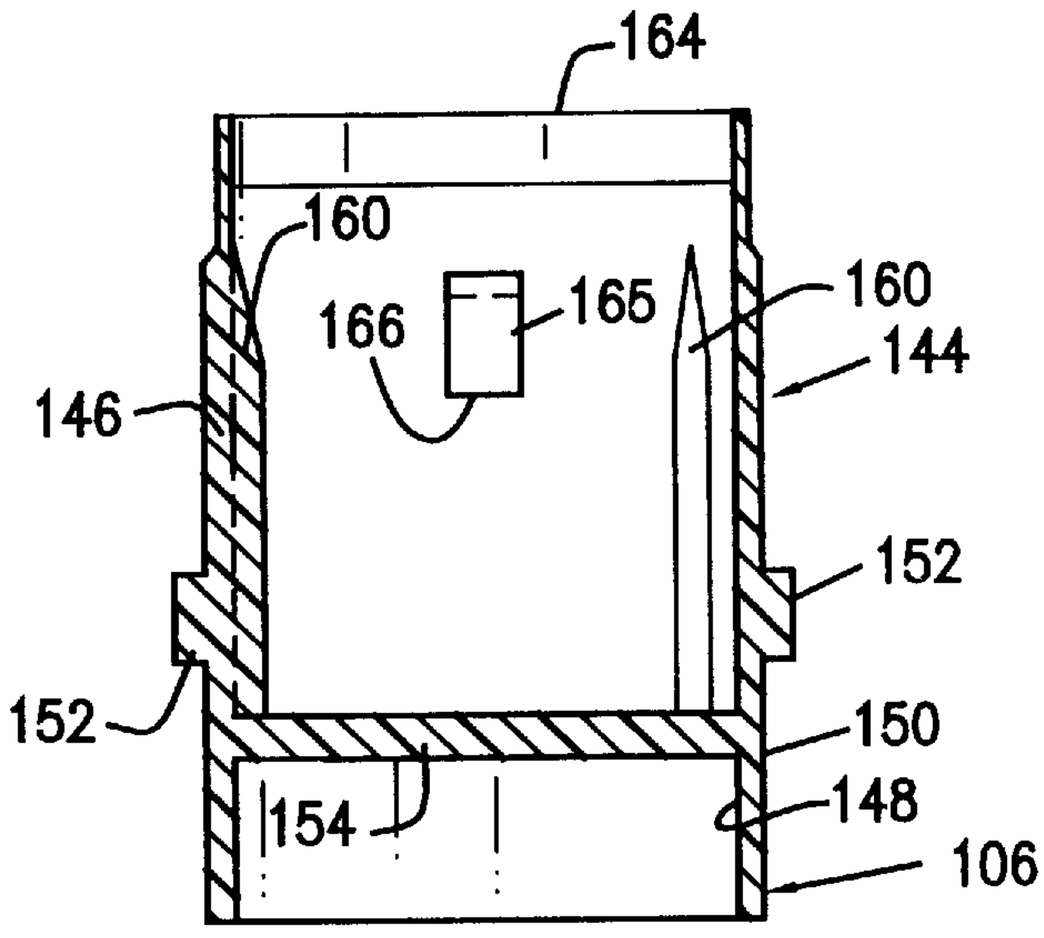


FIG. 5

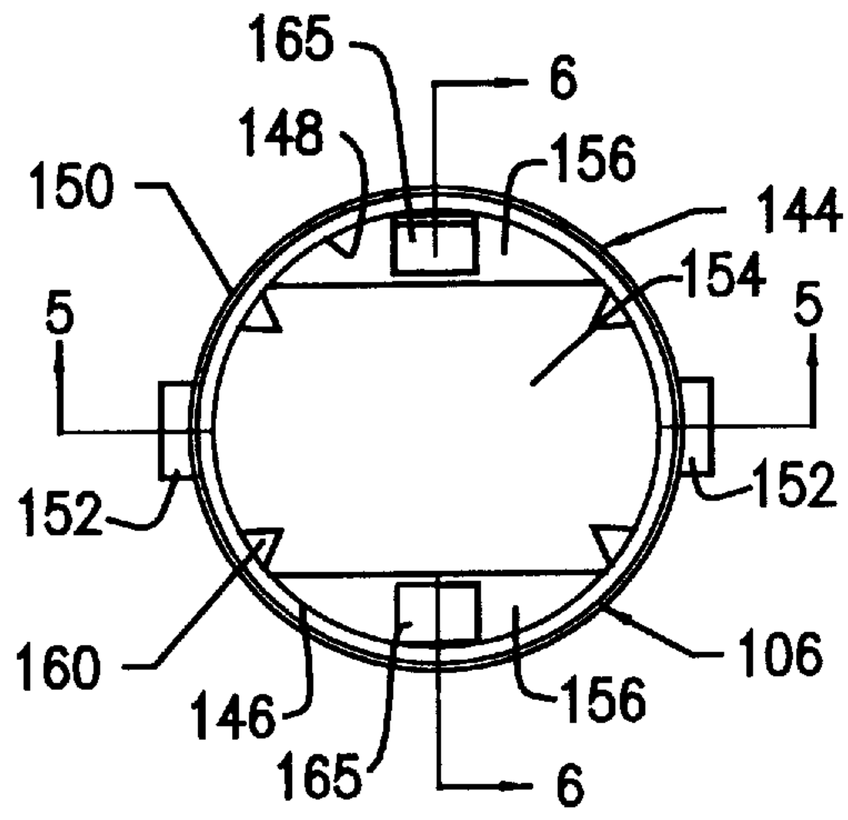


FIG. 4

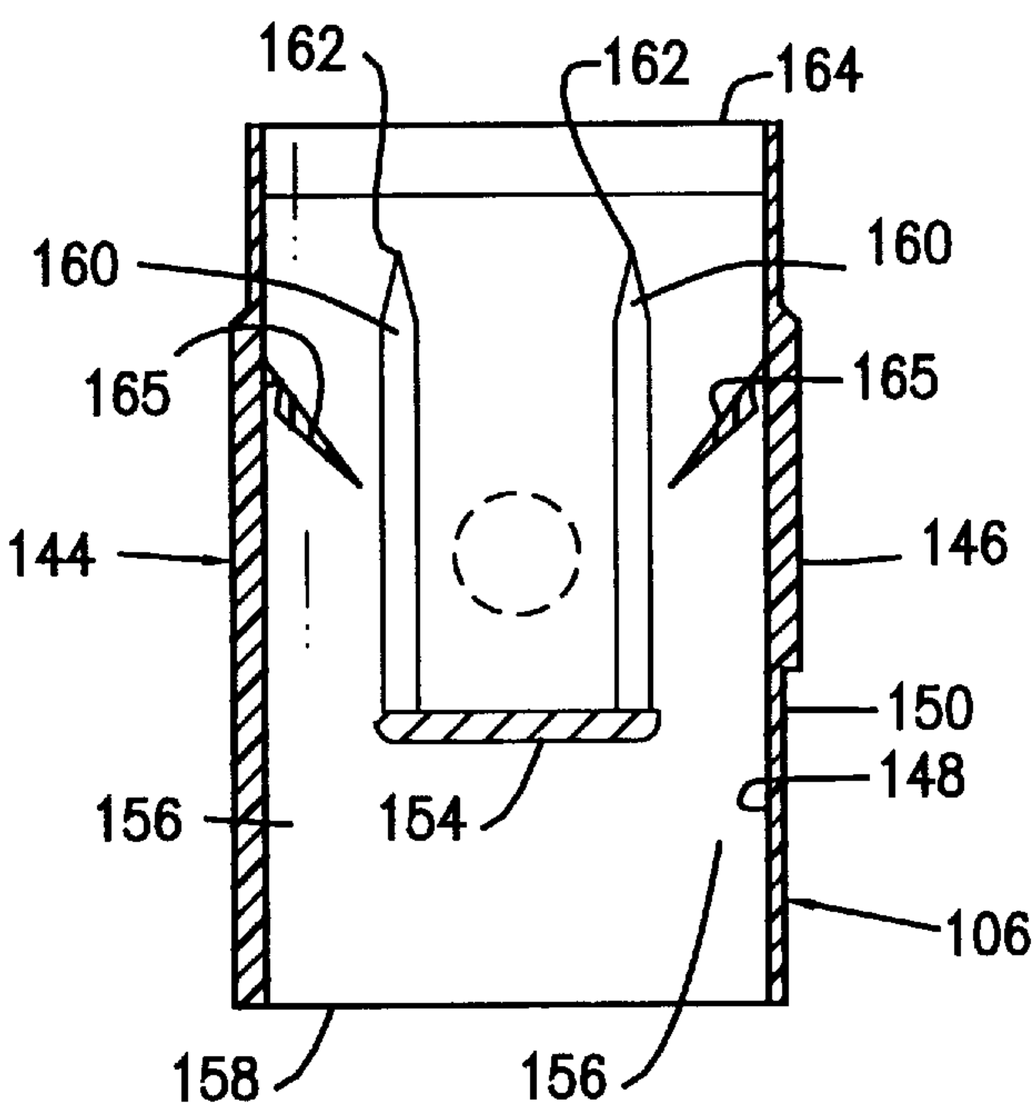


FIG. 6

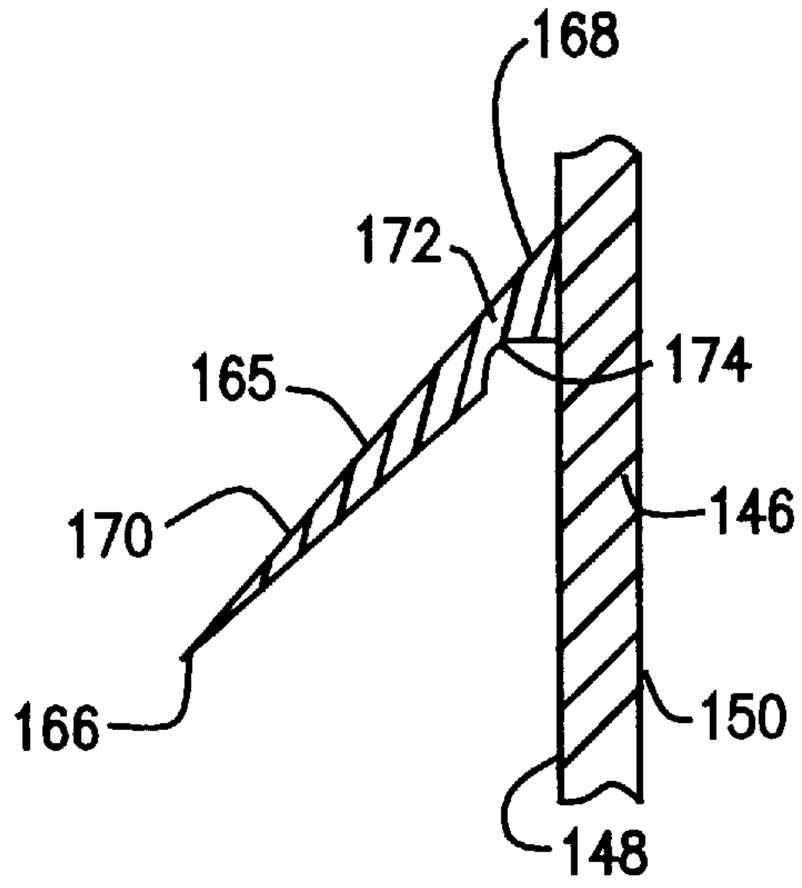


FIG. 7

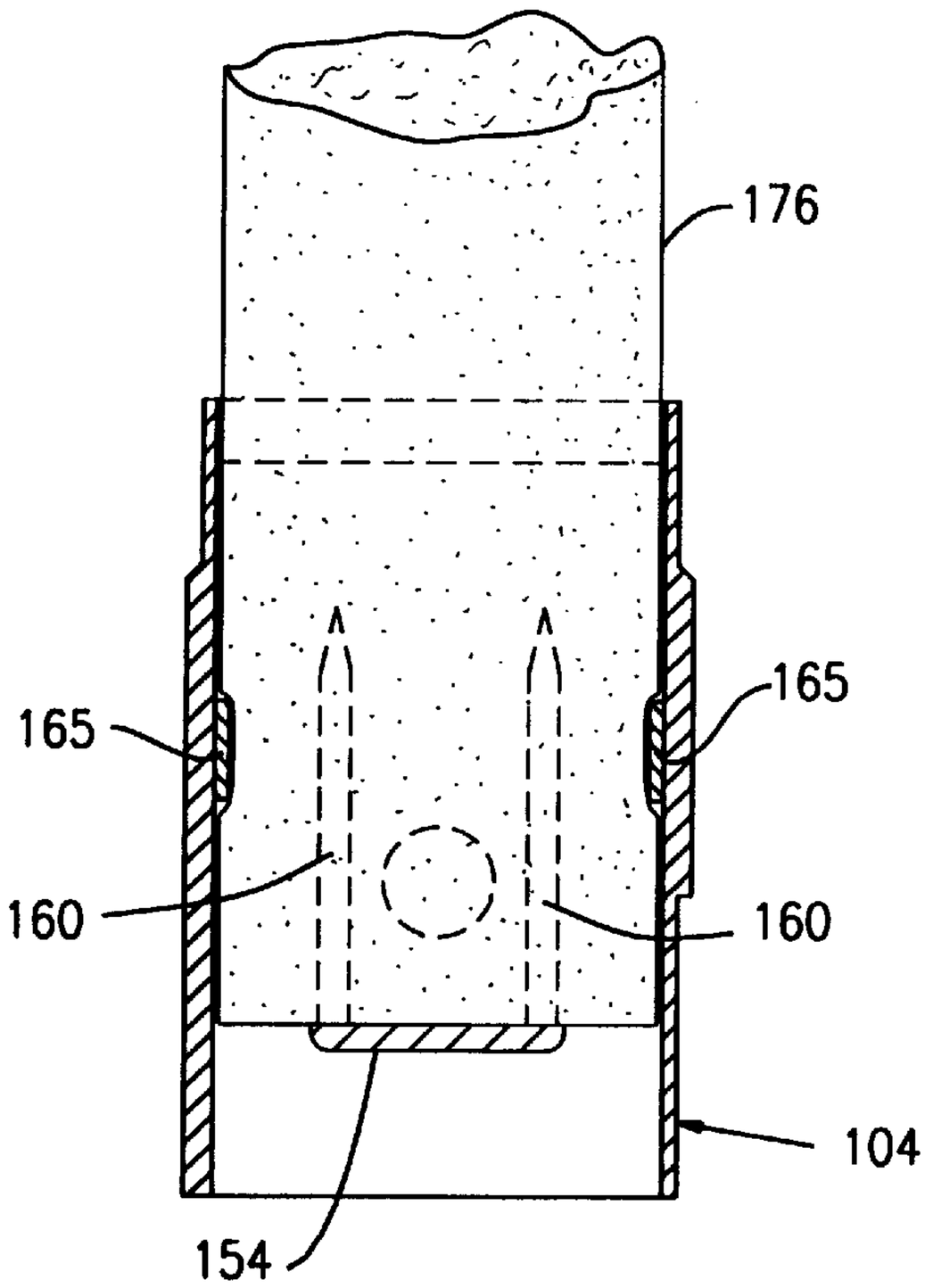


FIG. 8A

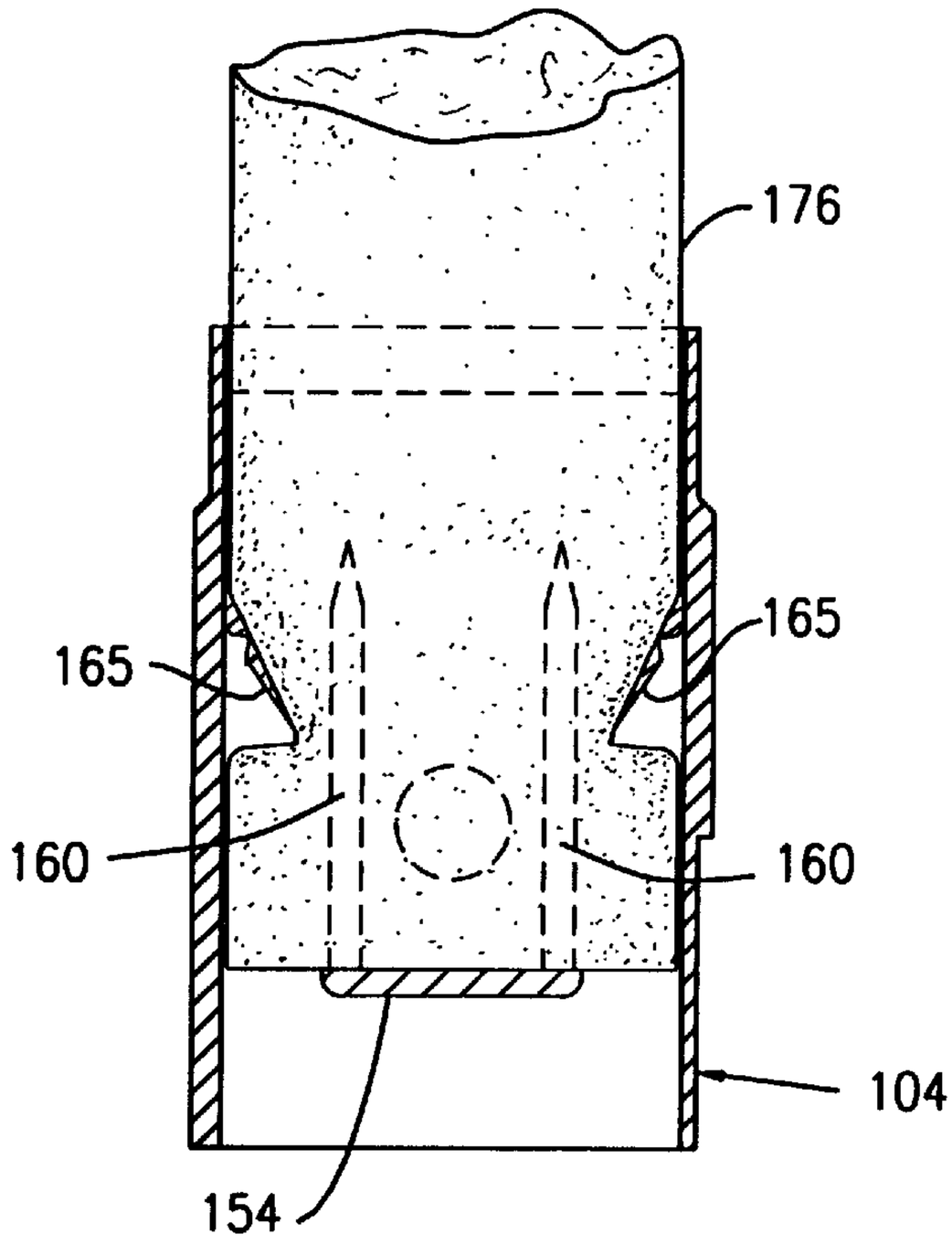


FIG. 8B

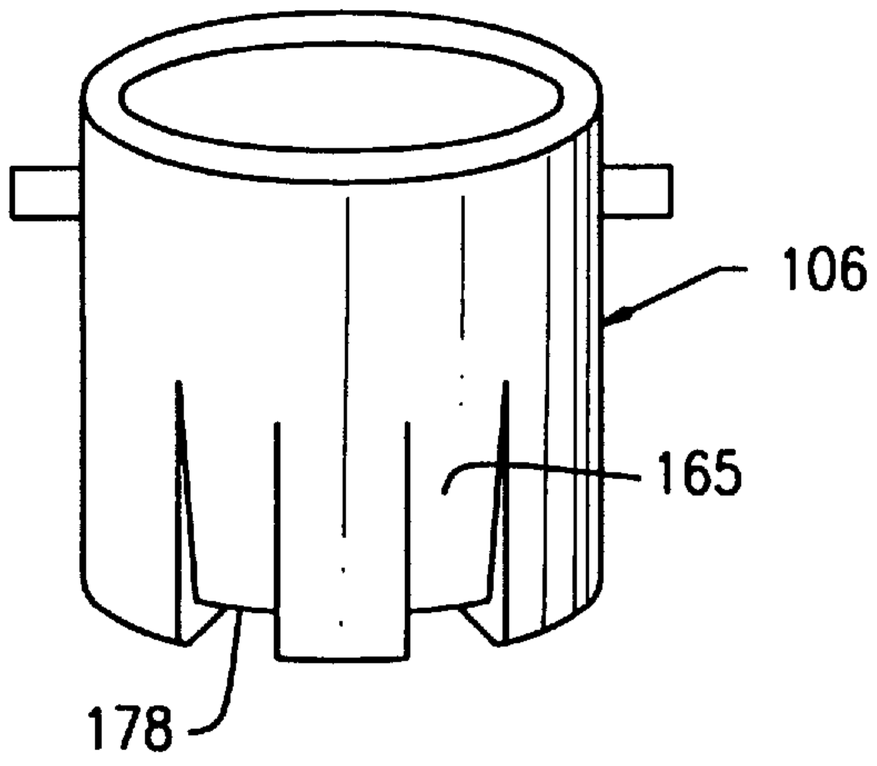


FIG. 13

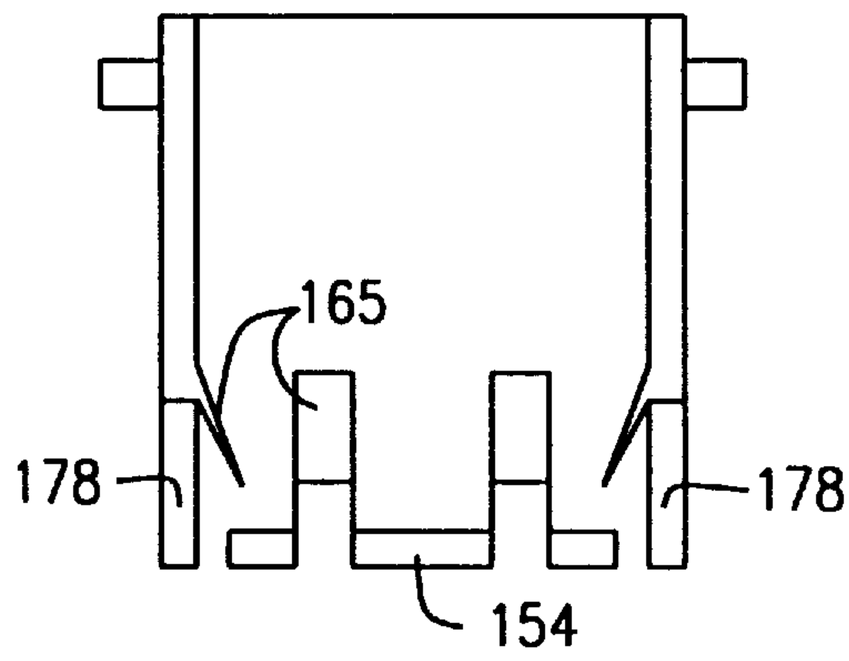


FIG. 12

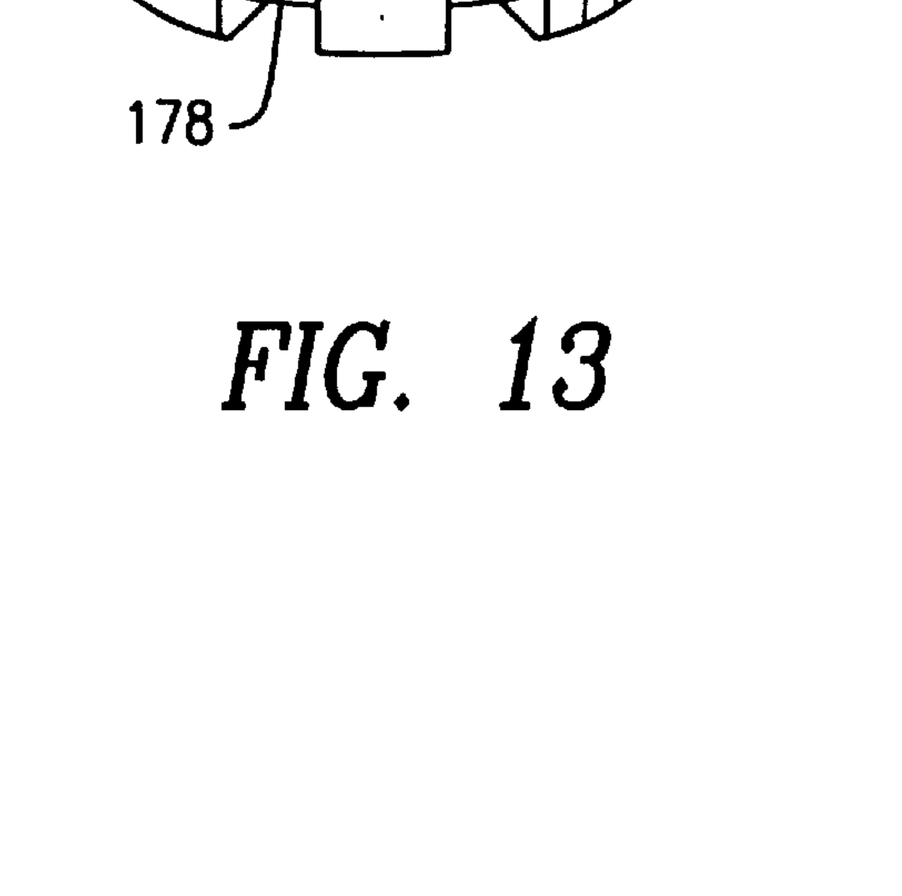


FIG. 15

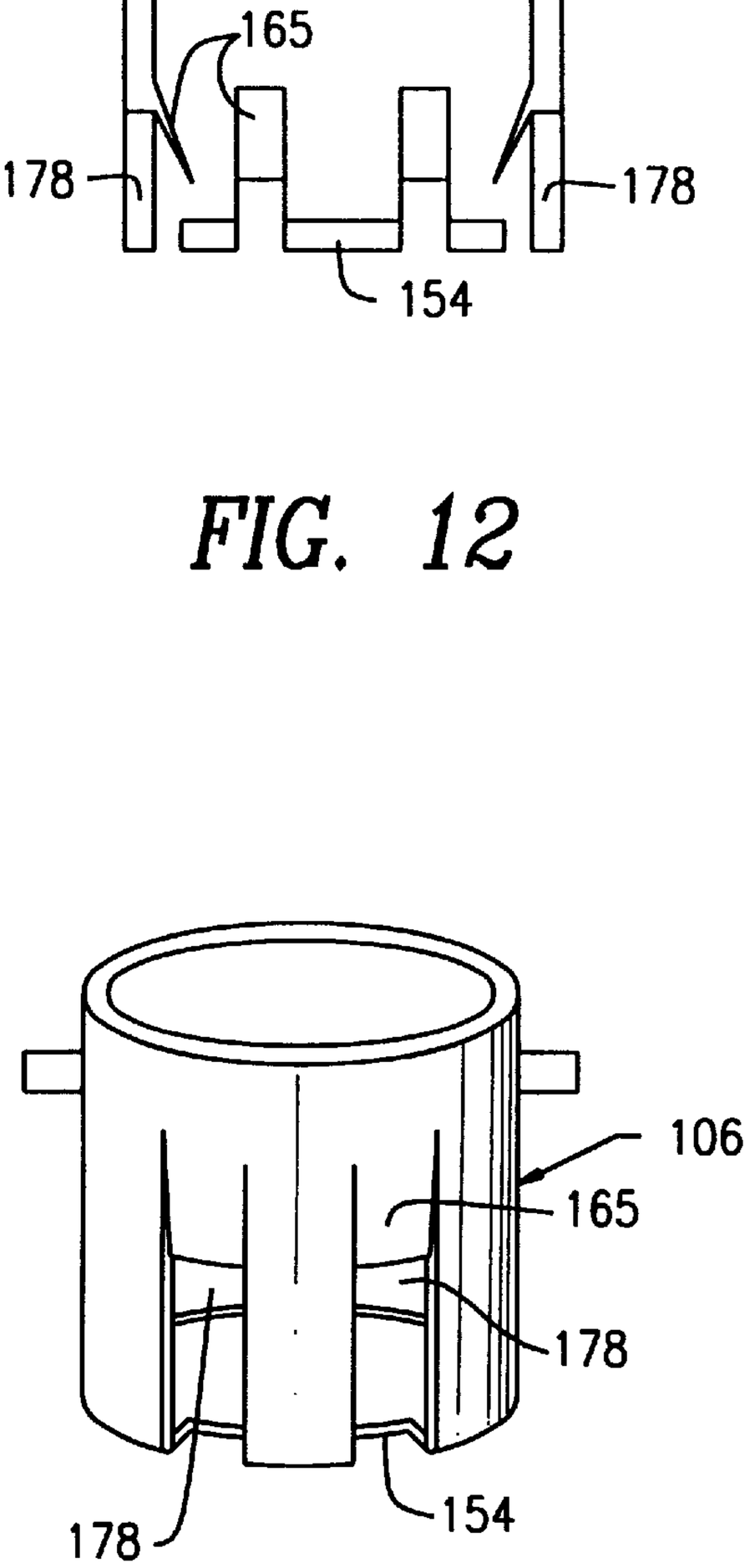


FIG. 14

PRODUCT DISPENSER AND HOLDER

FIELD OF THE INVENTION

The present invention relates in general to dispensers for products having a generally stick-like form, by way of example, cosmetic products, personal care and hygiene products, household products and the like.

BACKGROUND OF THE INVENTION

Products having a stick-like form for dispensing are generally in the nature of semi-solid or highly viscous materials, such as known cosmetic products which include lipstick, eye shadow, eye liner, mascara and the like. Other products which are dispensable in stick-like form are known as personal care and hygiene products, for example, deodorants, lip balms, sunscreens, insect repellents and the like. Generally, there are known other products such as household products which can be dispensed in stick-like form, for example, adhesives, polishes and the like. There is therefore known a number of products in stick-like form which are dispensable for various applications.

One form of a known dispenser for cosmetics is referred to as a lipstick case. The lipstick case generally includes a housing which is covered by a removable cap when the contained lipstick in stick-like form is in a retracted position. Upon removing the cap, the lipstick is advanced through the housing by means of a mechanism so as to expose the lipstick for application. The lipstick is typically mounted in a holder or carrier which is engaged by the mechanism to enable the lipstick to be moved within the housing between the retracted storage position and the extended user position. In order for the dispenser to function properly, it is a requirement that the lipstick be securely fastened within its holder or carrier.

To this end, there is known various designs for securing a lipstick to its holder or carrier. For example, Vaupel, U.S. Pat. No. 5,560,727 discloses a lipstick carrier having a spring element provided with an outwardly facing cam which engage a recess at the end of an outer lipstick tube to prevent the lipstick carrier from slipping out of the lipstick tube. At other times when the lipstick is retracted, rear engagement lugs on the spring element embed into the lipstick upon engagement of the cam with the inner surface of the lipstick tube to prevent the lipstick from slipping out of the lipstick carrier. However, the securing action is eliminated when the lipstick is fully extending, which can cause the lipstick to accidentally dislodge from the lipstick carrier during use.

Hopgood, U.S. Pat. No. 2,797,803 and Wild, U.S. Pat. No. 1,835,580 disclose a rigid metal carrier of open cylindrical cup shape. A pair of inwardly directed lugs formed from a portion of the metallic carrier are operative for retaining the inserted stick cosmetic, for example, stick colognes, stick deodorants and the like.

Reichenbach, U.S. Pat. No. 2,302,473 discloses a lipstick carrier having a metallic cup-shaped carrier formed with an annular inwardly projecting rib to aid in retaining the lipstick within the carrier.

Mazzola, et al., U.S. Pat. No. 5,609,430; Ackermann, et al., U.S. Pat. No. 5,599,124; Lombardi, et al., U.S. Pat. No. 5,197,814; Clark, U.S. Pat. No. 3,083,822; Grau, U.S. Pat. No. 3,838,169; Hultgren, U.S. Pat. No. 3,298,509; Spatz, U.S. Pat. No. 4,820,070 and German Patent No. DE 3442094 disclose a lipstick carrier provided with a plurality of inwardly directed longitudinally extending ribs for engaging the lipstick and securing same within the carrier.

Croce, U.S. Pat. No. 2,798,599 discloses a lipstick carrier having a pair of spaced apart helical ribs projecting inwardly for engaging the lipstick. When a lipstick is inserted into the carrier, the lipstick is cammed by the internal ribs so as to turn itself during the insertion operation thereby anchoring the lipstick in the carrier.

Gelardin, U.S. Pat. No. 2,318,152 discloses a lipstick carrier provided with a pair of inwardly directed tongues formed as dihedral angles with a sharp outer edge. The outer edges of the tongues are notched for anchoring a lipstick within the carrier against displacement therefrom.

Broder, U.S. Pat. No. 2,469,631 discloses a lipstick carrier having a base plate from which there extends a plurality of triangular-shaped prongs into which the lipstick is pressed.

Safianoff, U.S. Pat. No. 2,815,123 discloses a lipstick carrier which includes an internal ring supported by a plurality of radially extending ribs into which the bottom of a lipstick is embedded.

Notwithstanding the foregoing, there has been recognized a continuous problem of the lipstick or other product to be dispensed in stick-like form being dislodged from its holder or carrier. This can occur when the dispenser is subject to vibration, shock or repeated movement, such as during shipment. Under these conditions, it is possible for the formed tip of the lipstick to compress into the inner surface of the cap so as to be deformed. This results in a product which is not acceptable to the consumer, thereby often prompting return of the dispenser by either the distributor or consumer.

Accordingly, there is still the room for improvements in dispensers for various products which are provided in stick-like form in the nature of a semi-solid or highly viscous material for a multitude of applications.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide a product dispenser for semi-solid or highly viscous materials, such as cosmetic products, personal care and hygiene products, household products and the like which are provided generally in stick-like form.

It is also an object of the present invention to provide a product dispenser having a holder or carrier for securely retaining a product of stick-like form within the dispenser subsequent to manufacture, for example, during shipment, storage and subsequent use by the consumer.

In accordance with the present invention, which may be used with various types of dispensers for products in stick-like form, it has been discovered that one of the problems of the known dispensers has been the retention of the product within the holder or carrier which forms part of the dispenser. Thus, the present invention finds particular use in those dispensers generally referred to in the art as screwtype dispensers, or other such dispensers which require the use of a holder or carrier for the product.

To ensure that the product to be dispensed remains secure within the holder or carrier at all times, at least one, and preferably a plurality of barbs are formed extending from the holder or carrier. The barbs are formed of resilient polymer material having spring-like properties while being resiliently flexible. The barbs are displaceable into a generally non-interfering position upon insertion of the product into the holder or carrier. Displacement of the barbs is facilitated by cooling the product below room temperature to increase its hardness. Subsequently, the barbs due to their spring-like properties, reorient themselves away from the interior sur-

face of the holder or carrier so as to embed themselves into the product. In the event of vibration which would tend to cause the product to move axially within the holder or carrier, the barbs will penetrate further into the product further securing the product from movement. The penetration of the barbs into the product is facilitated by the spring-like properties of the barbs and the product being semi-solid or viscous in nature, particularly when returned to room temperature after insertion into the holder or carrier during the manufacturing process.

In accordance with one embodiment of the present invention there is described a holder for a product having a stick-like form, the holder comprising a body having an interior portion defining an opening adapted for receiving a portion of the product, at least one barb of polymer material extending away from the interior surface into the opening, the barb being displaceable proximate the interior surface upon the holder initially receiving the product therein, and thereafter, being extendible away from the interior surface into a portion of the product for preventing the product from being dislodged from the holder.

In accordance with another embodiment of the present invention there is described a holder for a product having a stick-like form, the holder comprising a body having an interior portion defining an opening adapted for receiving a portion of the product, at least one barb of polymer material extending away from the interior surface into the opening, the barb including a resilient portion having a cross-sectional thickness less than an adjacent portion of the barb.

In accordance with another embodiment of the present invention there is described a dispenser for a product having a stick-like form, the dispenser comprising a housing, a product within the housing moveable between a storage position and a user position, a holder for receiving the product moveable within the housing between the storage position wherein the product is inaccessible for use and the user position wherein the product is accessible for use, the holder including a tubular body having an interior surface defining an opening receiving a portion of the product therein, and at least one barb of polymer material extending away from the interior surface, the barb being displaceable proximate the interior surface upon the holder initially receiving the product therein, and thereafter, being extendible away from the interior surface into a portion of the product for preventing the product from being dislodged from the holder when the holder is in the storage position and the user position.

In accordance with another embodiment of the present invention there is described a dispenser for a product having a stick-like form, the dispenser comprising a housing, a product within the housing moveable between a storage position and a user position, a holder for receiving the product moveable within the housing between the storage position wherein the product is inaccessible for use and the user position wherein the product is accessible for use, the holder including a tubular body having an interior surface defining an opening receiving a portion of the product therein, and at least one barb of polymer material extending away from the interior surface, the barb including a resilient portion having a cross-sectional thickness less than an adjacent portion of the barb, the barb preventing the product from being dislodged from the holder when the holder is in the storage position and the user position.

BRIEF DESCRIPTION OF THE DRAWINGS

The above description, as well as further objects, features and advantages of the present invention will be more fully understood with reference to the following detailed description of a product dispenser and holder, when taken in conjunction with the accompanying drawings, wherein:

FIG. **1** is a cross-sectional view of an assembled dispenser constructed in accordance with one embodiment of the present invention;

FIG. **2** is a cross-sectional view of the dispenser base;

FIG. **3** is a cross-sectional view of the dispenser shell;

FIG. **4** is a top plan view of a holder or carrier in accordance with one embodiment of the present invention for securing a product in stick-like form therein;

FIG. **5** is a cross-sectional view taken along line **5**—**5** in FIG. **4**;

FIG. **6** is a cross-sectional view taken along line **6**—**6** in FIG. **4**;

FIG. **7** is an enlarged cross-sectional view showing a barb constructed in accordance with one embodiment of the present invention;

FIGS. **8**A and **8**B are cross-sectional views of the holder or carrier in operative relationship with a product of stick-like form during and after insertion within the holder or carrier;

FIG. **9** is a cross-sectional view of a holder or carrier constructed in accordance with another embodiment of the present invention;

FIG. **10** is a cross-sectional view of a holder or carrier constructed in accordance with another embodiment of the present invention;

FIG. **11** is a cross-sectional view of a holder or carrier constructed in accordance with another embodiment of the present invention;

FIG. **12** is a cross-sectional view of a holder or carrier constructed in accordance with another embodiment of the present invention;

FIG. **13** is a perspective view of a holder or carrier constructed in accordance with another embodiment of the present invention;

FIG. **14** is a perspective view of a holder or carrier constructed in accordance with another embodiment of the present invention; and

FIG. **15** is a cross-sectional view of a holder or carrier constructed in accordance with another embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to the drawings, wherein like reference numerals represent like elements, there is shown in FIG. **1** an assembled dispenser constructed in accordance with one embodiment of the present invention and generally designated by reference numeral **100**. The dispenser **100** is constructed from an inner base **102**, a surrounding outer shell **104**, a holder/carrier **106** and an outer cap **108**. The components as thus far described can be formed from suitable plastic materials by injection molding or the like.

The base **102**, as shown in FIG. **2**, is formed from a hollow tubular member **110** which includes three segments **112**, **114**, **116** of varying diameter having their longitudinal axes in alignment with one another. Segment **112** is formed with a closed bottom **118** and segment **116** is formed with an open end **120** surrounded by a protruding rib **122**. Due to the varying diameters between the segments **112**, **114**, **116**, the tubular member **110** has a telescopic appearance.

Segment **116** is provided with a pair of elongated openings **124** extending in the longitudinal direction of the

segment terminating at either end by a lateral opening **126**. The openings **124** are generally spaced apart around segment **116** by 180°, only one such opening being shown. The upper end of opening **124** adjacent lateral opening **126** is provided with a slot **128** which extends through rib **122** to enable the upper end of the tubular member **110** to be spread open to create a greater effective diameter as to be described hereinafter. The surrounding rib **122**, due to its tapered shape, is provided with an underlying lip **130** circumscribing the tubular member **110**.

Referring now to FIG. **3**, the outer shell **104** is constructed in the nature of a hollow tubular member **132** having an inside diameter slightly larger than the outside diameter of segment **116** of tubular member **110**. The tubular member **132** is provided with a spiral shaped groove **134** formed in the interior surface **136**. The spiral groove **134** communicates between the open ends **138**, **140** of the tubular member **132**. The interior surface **136** of the tubular member **132** adjacent open end **140** is provided with a circumscribing recess **142**.

Shell **104** is positioned over segment **116** of the base **102** as best shown in FIG. **1**. Due to the slight dimensional differences between the inside diameter of shell **104** and outside diameter of segment **116**, the shell is rotatable about its longitudinal axis. In the arrangement thus far described, groove **134** is arranged overlying openings **124** and lateral openings **126** at various positions therealong as the shell is rotated. The shell **104** is retained in position by the lip **130** of rib **122** being received in generally interference or snapped fit within the recess **142** formed within the open end **140** of the shell. As thus far described, the base **102** and shell **104** are generally of conventional construction as heretofore known.

Turning now to FIGS. **4–7**, a holder/carrier **106** constructed in accordance with one embodiment of the present invention will now be described The holder/carrier **106** is constructed from a hollow tubular member **144** generally defined by a cylindrical shaped wall **146** having an inner surface **148** and an outer surface **150**. Other shapes such as oval, square and the like may be used in dispensers **100** having a generally similar shape. A pair of cam followers **152** are provided extending radially outward from the outer surface **150** of wall **136**. The cam followers **152**, generally cylindrical members, are spaced apart 180° so as to register with openings **124** within the base **102**. In this regard, the cam followers **152** are sized so as to be slidingly received within opening **124** and lateral openings **126**, while being received within the groove **134** within the shell **104**. As such, the outside diameter of the holder/carrier **106** is slightly less than the inside diameter of segment **116** of the base **102** thereby enabling the holder/carrier to slide longitudinally therethrough during operation of the dispenser **100**.

The holder/carrier **106** is further provided with a bottom wall **154** formed with a pair of spaced apart side openings **156**. The bottom wall **154** is shown at a location spaced from the bottom open end **158** of the holder/carrier **106**. It is to be understood that the bottom wall **154** may be positioned at other locations, for example, proximate to, adjacent or at the location of the bottom open end **158**. In addition, the bottom wall **154** may be a continuous wall completely closing off the bottom open end **158** of the holder/carrier **106**, as opposed to having the side openings **156**.

A plurality of longitudinally extending ribs **160** may be formed along the inner surface **148** of the holder/carrier **106**. The ribs **106** may have any cross-sectional shape, for example, triangular, rectangular, oval and the like, terminating at a point **162** or other shape as may be desired. Although four ribs **160** arranged spaced 90° apart are shown, it is to be understood that any greater or lesser number of ribs, as well as other shapes of such ribs may be provided on the inner surface **148**. The ribs extend generally from the bottom wall **154** to a location proximate the upper open end **164** of the holder/carrier **106**.

In accordance with the present invention, at least one, and preferably a plurality of barbs **165** are provided extending inwardly from the inner surface **148** of wall **146** forming the holder/carrier **106**. The overall shape of the barbs **165** in plan view, such as shown in FIG. **5**, may take a variety of forms. For example, the barbs **165** may be rectangular, square, triangular, U-shaped, etc. The cross-sectional shape of the barbs **165** may be tapered, rectangular and the like. In addition, the free end **166** of the barbs **165** may also have a variety of shapes. In this regard, although the free end **166** is shown as being straight, as well as tapered, the free end could be curved, provided with undulations, saw teeth, rounded, pointed and the like.

As best shown in FIG. **7**, the barbs **165** generally include an attachment portion **168**, a distal portion **170** and a resilient/flexible portion **172**. The attachment portion **168** is formed on the inner surface **148** extending outwardly therefrom. The resilient/flexible portion **172** connects the attachment portion **168** to the distal portion **170** by having an area of generally reduced cross-section compared to the attachment portion or the distal portion. In particular, the resilient/flexible portion **172** is formed with an inside radius **174** or curved portion which provides a smooth transition between the distal portion **170** and attachment portion **168** to avoid a stress point, as well as providing an area of reduced thickness, i.e., at the resilient/flexible portion **172**. The radius **174** or curved portion may also be formed on the outside of the resilient/flexible portion **172**. This construction of the barbs **165** facilitates the distal portion **170** bending or flexing about the resilient/flexible portion **172**. However, it is contemplated that the distal portion **170** may be attached directly to the attachment portion **168** or to the inner surface **148**.

Although the barbs **165** have been described as comprising an attachment portion **168**, distal portion **170** and resilient/flexible portion **172**, it is to be understood that the barbs are generally integrally formed as one solid continuous member from polymer material generally contemporaneously with the formation of the holder/carrier **106**. By way of example, the barbs **165** as thus far described can be formed using injection molding in the direction of draw to form the barbs from the same material as the holder/carrier **106**. As will be understood, the barbs **165** are intended to be resilient and flexible, as well as having spring-like properties. To this end, the barbs **165**, as well as the remaining portions of the holder/carrier **106** can be formed from a variety of polymer materials which exhibit these properties, for example, nylon, polycarbonate, polypropylene and preferably Acetal polymer material. However, if desired, the barbs **165** can be formed from a polymer material different from that of the holder/carrier **106**.

At least one barb **165**, and preferably a plurality of such barbs, are provided extending inwardly within the interior of holder/carrier **106**. The larger the size of the product to be dispensed, generally the greater the number of barbs **165** will be employed, as well as barbs potentially of greater size. The barbs **165** are generally uniformly spaced apart around the interior surface **148** of wall **146**. However, a symmetrical arrangement of the barbs **165** is not required. As shown in accordance with one embodiment, the barbs **165** are posi-

tioned proximate the upper opened end **164** of the holder/carrier **106** so as to be spaced from the bottom wall **154**. The barbs **165** are initially formed so as to create an angle with respect to the inner surface **148** of wall **146** on the order of about 30° by way of example only. However, the angle may be greater or smaller as desired, for example, generally in the range of about 15° to about 60°.

Referring now to FIGS. **8**A and **8**B, the operation of the dispenser **100** including the holder/carrier **106** will now be described. The holder/carrier **106** is initially arranged as shown in FIG. **6** with the barbs **165** extending outwardly into the interior of the holder/carrier. As previously noted, the barbs **165** are constructed from plastic polymer material which possesses spring-like properties. A billet **176** of the product in stick-like form to be dispensed is blown into the holder/carrier **106** through the upper opened end **164**. Initially, the billet is cooled to provide the billet in a more rigid form, especially when the billet is in the nature of a semi-solid or one of high viscosity. As the billet **176** is blown into the holder/carrier **106**, the barbs **165** are bent or pressed downwardly about the resilient/flexible portion **172** towards opposing inner surface **148** of wall **146**. As shown in FIG. **8**A, the barbs **165** are bent downwardly adjacent or into surface contact with the inner surface **148** thereby minimizing the obstruction for the insertion of the billet **176** into the holder/carrier **106**.

As the billet **176** begins to soften by returning to room temperature, the barbs **165** due to their spring-like nature spring back towards their original position when formed as shown in FIG. **8**B. As a result, the barbs **165** embed themselves into the surrounding portions of the billet **176**. In this relationship, the free ends **166** of the barbs **165** point downwardly at an angle digging into the billet **176**. In the event the billet **176**, due to vibration, dropping or otherwise, was to move longitudinally within the holder/carrier **106**, the barbs **166** would dig further into the billet precluding its longitudinal movement. In addition, the ribs **160** assist in precluding the billet **176** from twisting or rotating within the holder/carrier **106**. It is also contemplated that the material forming the stick-like product can be molded directly into the holder/carrier **106** as opposed to being blown in in the form of a billet **176**. For example, this technique can be used in forming stick-type deodorants, adhesive sticks, sunscreen sticks and the like.

The holder/carrier **106** is inserted into the base **102** by spreading the opened end **120** as facilitated by slot **128** so as to accommodate the cam followers **152**. The cam followers **152** are received within the openings **124** and extend outwardly therefrom into the groove **134**. In this manner, upon rotation of the shell **104** relative to base **102**, the cam followers **152** will track within the groove **134** to cause the holder/carrier **106** to move longitudinally through the dispenser **100** thereby exposing various portions of the billet **176**. Although the billet **176** has been described as being blown into the holder/carrier **106** prior to insertion into the base **102**, it is to be understood that the billet may be blown into the holder/carrier after assembly with the base.

Referring now to FIGS. **9–11**, there are shown various modifications of the holder/carrier **104** in accordance with the present invention. In the various embodiments disclosed, the bottom wall **154** is positioned adjacent the bottom open end **158** of the holder/carrier **106**. As further shown in FIG. **9**, the barbs **165** are arranged approximately midway along the length of the holder/carrier **106**. In FIG. **10**, the barbs **165** are located adjacent the bottom open end **158**. As shown in FIG. **11**, the barbs **165** are located adjacent the upper open end **164**. It is further noted that ribs **160** have been eliminated from the holder/carriers **106** shown in FIGS. **10** and **11**. Thus, it is to be understood that the location of the bottom wall **158** may vary between the bottom and upper open ends **158, 164**. In addition, the location of the barbs **165** between the bottom and open ends **158, 164** can also be varied. In this regard, the barbs **165** are not required to be located all at the same vertical height, but may be staggered at various locations. In addition, it is not a requirement of the present invention to include ribs **160**.

Referring now to FIGS. **12–14**, still further embodiments of the holder/carrier **106** in accordance with other embodiments will now be described. As thus far described, the wall **146** forming the holder/carrier **106** has been described as generally solid in form. Specifically, the barbs **165** have been described as being formed extending overlying a portion of the inner surface **148** of wall **146** as clearly shown in FIG. **6**. However, it is to be understood that wall **146** may be provided with a cutout opposing barbs **165**. For example, as shown in FIG. **12**, barbs **165** are formed adjacent the bottom open end **158** opposing a cutout **178**. The cutout **178** is more clearly shown in FIG. **13**. The cutouts **178** are formed during the injection molding process used to form the holder/carrier **106**. The barbs **165** formed in this manner opposing cutouts **178** may be produced by injection molding using cam action or slide action. The cutouts **178** provide a space into which the barbs **165** may be depressed during insertion of the billet **176**. In the embodiment disclosed in FIG. **14**, the barbs **165** are positioned midway along the length of the holder/carrier **106**. The cutouts **178** are shown extending from the attachment portion **168** of the barbs **165** to the bottom wall **154**. However, it is to be understood that the cutouts **178** may occupy a lesser degree of the sidewall **146**.

Turning now to FIG. **15**, another embodiment of a holder/carrier **106** will be described. As thus far described, the barbs **165** have been positioned around the inner surface **148** of wall **146**. It is also contemplated that barbs **165** may also be positioned on the surface of bottom wall **154** extending upwardly into the interior of the holder/carrier **106**. This arrangement of the barbs **165** is particularly suited to use with stick forming material which are molded into the holder/carrier **106**, as opposed to being blown in in the form of a billet **176**.

Although the invention herein has been described with reference to particular embodiments, it is to be understood that the embodiments are merely illustrative of the principles and application of the present invention. It is therefore to be understood that numerous modifications may be made to the embodiments and that other arrangements may be devised without departing from the spirit and scope of the present invention as defined by the claims.

What is claimed is:

1. A holder for a product having a stick-like form, said holder comprising a body including a solid sidewall portion having an interior surface defining an interior opening adapted for receiving a portion of said product, at least one barb of polymer material extending away from said interior surface of said solid sidewall portion into said interior opening, said barb including an attachment portion attached to said interior surface of said solid sidewall portion and a distal portion, said distal portion connected to said attachment portion by a resilient portion having a radius of curvature, said resilient portion enabling the displacement of said distal portion from a first position extending into said interior opening away from said interior surface of said solid sidewall portion to a second position extending within said interior opening overlying and proximate said interior surface of said solid sidewall portion upon said holder initially

receiving said product therein, and thereafter, being extendible away from the underlying interior surface of said solid sidewall portion into a portion of said product received within said interior opening for preventing said product from being dislodged from said holder.

2. The holder of claim **1**, wherein said body comprises a cylindrical hollow member.

3. The holder of claim **1**, further including a plurality of said barbs arranged at spaced radial locations about said interior surface.

4. The holder of claim **1**, wherein said resilient portion enables said distal portion to return to its extended position to embed into said product.

5. The holder of claim **1**, wherein said barb has a generally rectangular shape.

6. The holder of claim **1**, further including a product having a stick-like form received within said holder.

7. The holder of claim **1**, further including a cosmetic product having a stick-like form received within said holder.

8. The holder of claim **1**, wherein said polymer material has spring-like properties.

9. The holder of claim **1**, wherein said at least one barb is an appendage independent from said body and attached thereto by said attachment portion.

10. A holder for a product having a stick-like form, said holder comprising a body including a solid sidewall portion having an interior surface defining an interior opening adapted for receiving a portion of said product, at least one barb of polymer material overlying said interior surface of said solid sidewall portion and extending away therefrom into said interior opening, said barb including a resilient portion having a cross-sectional thickness less than an adjacent portion of said barb, said resilient portion enabling the displacement of said barb to a position overlying and proximate said interior surface of said solid sidewall portion upon said holder initially receiving said product therein, and thereafter, being extendible away from the underlying interior surface of said solid sidewall portion into a portion of said product received within said interior opening for preventing said product from being dislodged from said holder.

11. The holder of claim **10**, further including a product having a stick-like form received within said holder.

12. The holder of claim **11**, wherein said product comprises a cosmetic product.

13. The holder of claim **10**, wherein said polymer material has spring-like properties.

14. The holder of claim **10** wherein said resilient portion is defined by a curved portion.

15. The holder of claim **10**, wherein said at least one barb comprises an appendage independent from said body, said barb having an attachment portion for attaching said barb to said body.

16. A dispenser for a product having a stick-like form, said dispenser comprising a housing, a product within said housing moveable between a storage position and a user position, a holder for receiving said product moveable within said housing between said storage position wherein said product is inaccessible for use and said user position wherein said product is accessible for use, said holder including a tubular body including a solid sidewall portion having an interior surface defining an interior opening receiving a portion of said product therein, and at least one barb of polymer material overlying and extending away from said interior surface of said solid sidewall portion into said interior opening, said barb including an attachment portion attached to said interior surface of said solid sidewall portion and a distal portion, said distal portion connected to said attachment portion by a resilient portion having a radius of curvature, said resilient portion enabling the displacement of said distal portion from a first position extending into said interior opening away from said interior surface of said solid sidewall portion to a second position within said interior opening overlying and proximate said interior surface of said solid sidewall portion upon said holder initially receiving said product therein, and thereafter, being extendible away from the underlying interior surface of said solid sidewall portion into a portion of said product within said interior opening for preventing said product from being dislodged from said holder when said holder is in said storage position and said user position.

17. The dispenser of claim **16**, further including a cap enclosing one end of said housing when said product is in said storage position.

18. The dispenser of claim **16**, wherein said body comprises a cylindrical hollow member.

19. The dispenser of claim **16**, further including a plurality of said barbs arranged at spaced radial locations about said interior surface.

20. The dispenser of claim **16**, wherein said resilient portion enables said distal portion to extend to its extended position to embed into said product.

21. The dispenser of claim **16**, wherein said barb has a generally rectangular shape.

22. The dispenser of claim **16**, wherein said product has a stick-like form.

23. The dispenser of claim **16**, wherein said product comprises a cosmetic product.

24. The dispenser of claim **16**, wherein said polymer material has spring-like properties.

25. The dispenser of claim **16**, wherein said at least one barb is an appendage independent from said body and attached thereto by said attachment portion.

26. A dispenser for a product having a stick-like form, said dispenser comprising a housing, a product within said housing moveable between a storage position and a user position, a holder for receiving said product moveable within said housing between said storage position wherein said product is inaccessible for use and said user position wherein said product is accessible for use, said holder including a tubular body including a solid sidewall having an interior surface defining an interior opening receiving a portion of said product therein, and at least one barb of polymer material overlying and extending away from said interior surface of said solid sidewall into said interior opening, said barb including a resilient portion having a cross-sectional thickness less than an adjacent portion of said barb, said barb being displaceable within said interior opening overlying and proximate said interior surface of said solid sidewall upon initial engagement with said product, and thereafter, being extendable away from the underlying interior surface of said solid sidewall and into said product, said barb preventing said product from being dislodged from said holder when said holder is in said storage position and said user position.

27. The dispenser of claim **26**, further including a cap enclosing one end of said housing when said product is in said storage position.

28. The dispenser of claim **26**, wherein said product has a stick-like form.

29. The dispenser of claim **26**, wherein said product comprises a cosmetic product.

30. The dispenser of claim **26**, wherein said polymer material has spring-like properties.

31. The dispenser of claim **26**, wherein said resilient portion is defined by a curved portion.

32. The dispenser of claim 31, wherein said curved portion connects a distal portion of said barb to an attachment portion attached to said interior surface.

33. The dispenser of claim 26, wherein said holder and said barb are integrally formed.

34. The dispenser of claim 26, wherein said product comprises lipstick.

35. The dispenser of claim 26, wherein said at least one barb is an appendage independent from said body, said barb having an attachment portion for attaching said barb to said body.

36. A holder for a product having a stick-like form, said holder comprising a hollow body having a solid sidewall having an interior surface defining an interior opening adapted for receiving a portion of said product, at least one barb of polymer material attached to and extending from said solid sidewall of said body into said interior opening overlying said interior surface of said solid sidewall, said barb being displaceable within said interior opening proximate an underlying portion of said solid sidewall of said body when said holder initially receives said product therein, and thereafter, being extendible away from the underlying portion of said solid sidewall into a portion of said product for preventing said product from being dislodged from said holder.

37. The holder of claim 36, wherein said body comprises a cylindrical hollow member.

38. The holder of claim 36, further including a plurality of said barbs arranged at spaced radial locations about said interior surface.

39. The holder of claim 36, wherein said barb includes an attachment portion connected to said inner surface and a distal portion, said distal portion connected to said attachment portion by a resilient portion enabling the displacement of said distal portion proximate the underlying interior surface.

40. The holder of claim 39, wherein said resilient portion enables said distal portion to return to its extended portion to embed into said product.

41. The holder of claim 39, wherein said resilient portion includes a radius of curvature.

42. The holder of claim 36, wherein said barb has a generally rectangular shape.

43. The holder of claim 36, further including a product having a stick-like form received within said holder.

44. The holder of claim 36, wherein said barb includes a resilient portion which maintains said barb normally extending outwardly into said opening away from the underlying interior surface and enabling said barb to be displaceable proximate the underlying interior surface.

45. The holder of claim 36, further including a cosmetic product having a stick-like form received within said holder.

46. The holder of claim 36, wherein said polymer material has spring-like properties.

47. The holder of claim 36, wherein said at least one barb is an appendage independent from said body, said barb having an attachment portion for attaching said barb to said body.

48. A dispenser for a product having a stick-like form, said dispenser comprising a housing, a product within said housing moveable between a storage position and a user position, a holder for receiving said product moveable within said housing between said storage position wherein said product is inaccessible for use and said user position wherein said product is accessible for use, said holder including a tubular body having a solid interior surface defining an interior opening receiving a portion of said product therein, and at least one barb of polymer material attached to and extending from said solid interior surface of said body into said opening overlying a portion of said solid interior surface, said barb being displaceable from within said interior opening overlying and proximate an underlying solid interior surface of said body when said holder initially receives said product therein, and thereafter, being extendible away from the underlying solid interior surface into a portion of said product for preventing said product from being dislodged from said holder when said holder is in said storage position and said user position.

49. The dispenser of claim 48, further including a cap enclosing one end of said housing when said product is in said storage position.

50. The dispenser of claim 48, wherein said body comprises a cylindrical hollow member.

51. The dispenser of claim 48, wherein said barb including an attachment portion connected to said inner surface and a distal portion, said distal portion connected to said attachment portion by a resilient portion enabling the displacement of said distal portion proximate the underlying interior surface.

52. The dispenser of claim 51, wherein said resilient portion enables said distal portion to extend to its extended position to embed into said product.

53. The dispenser of claim 51, wherein said resilient portion includes a radius of curvature.

54. The dispenser of claim 48, wherein said barb has a generally rectangular shape.

55. The dispenser of claim 48, wherein said product has a stick-like form.

56. The dispenser of claim 48, wherein said product comprises a cosmetic product.

57. The dispenser of claim 48, wherein said barb includes a resilient portion which maintains said barb normally extending outwardly into said opening away from the underlying interior surface and enabling said barb to be displaceable proximate the underlying interior surface.

58. The dispenser of claim 48, wherein said polymer material has spring-like properties.

59. The dispenser of claim 48, wherein said at least one barb is an appendage independent from said body, said barb having an attachment portion for attaching said barb to said body.

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